

30. The method of claim 27 further comprising adjusting the pass band characteristic of the patch antenna to reduce the need for filtering of a received signal having predetermined frequency characteristics.

REMARKS

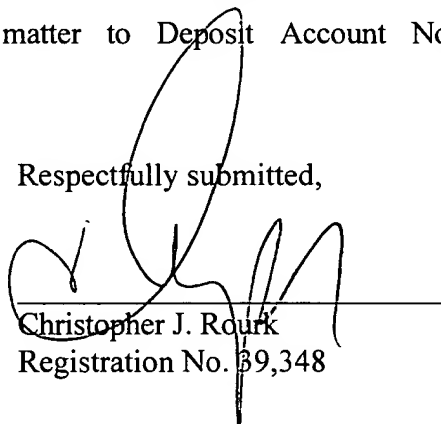
Claims 1 through 12 and 22 through 30 are pending in this application. All pending claims have been rejected, and the rejection has been made final. Claims 7 and 29 have been cancelled without prejudice or disclaimer. The Applicants appreciate the indication by the Examiner that claim 29 is drawn to allowable subject matter. Claims 1, 8, 22, and 27 have been amended to clarify the novel features of the present invention in accordance with this indication by the Examiner.

The Applicants have made a diligent effort to advance the prosecution of this application, and respectfully submit that the rejection of all pending claims has been overcome and requests that the rejections be withdrawn. Entry of this Amendment after Final and a Notice of Allowance of Claims 1 through 6, 8 through 12, 22 through 28 and 30 is respectfully solicited. The Examiner is invited to contact the Attorney for the Applicants at the telephone number provided below if further explanation of the Applicants' position would help to advance the prosecution of the application.

A marked-up version of the changes made to the claims by the current amendment is attached hereto.

No fee is believed due with this Response. If any required fee has been overlooked, the Commissioner of Patents and Trademarks is hereby authorized to charge any fee deficiency or to credit any fee overpayment relating to this matter to Deposit Account No. 01-0657.

Respectfully submitted,


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VERSION WITH MARKINGS TO SHOW CHANGES MADE

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In the Claims

1. (TWICE AMENDED) A system for wireless communications comprising:
a hand-held wireless communications device;
an antenna coupled to the hand-held wireless communications device, the antenna
configured to radiate with greater field intensity over an area of less than 360 degrees of arc;
5 a transmitter amplifier coupled to the antenna, the transmitter amplifier having an output
impedance that matches the impedance of the antenna, the impedance of the antenna
determined by performing a finite element analysis on a design of the antenna to determine an
estimated output impedance, and adjusting the antenna if the estimated output impedance
does not approximately match the transmitter amplifier output impedance; and
10 wherein the antenna is oriented such that the area of less than 360 degrees of arc is in the
direction away from a head of a user of the hand-held wireless communications device.

8. (TWICE AMENDED) A system for wireless communications comprising:
a hand-held wireless communications device;
a transmit antenna coupled to the hand-held wireless communications device;
a transmitter amplifier coupled to the transmit antenna, the transmitter amplifier having
5 an output impedance that matches [the] an impedance of the transmit antenna, the impedance of
the transmit antenna determined by performing a finite element analysis on a design of the
transmit antenna to determine an estimated output impedance, and adjusting the area of the
transmit antenna if the estimated output impedance does not approximately match the
transmitter amplifier output impedance; and
10 a receive antenna coupled to the wireless communications device.

22. (AMENDED) A method for wireless communications comprising:
modulating speech data onto an electromagnetic signal;

transmitting the electromagnetic signal from a handheld device having an antenna that
transmits with a greater field intensity over an area of less than 360 degrees of arc in a direction
5 away from a head of a user; and

wherein the antenna has an impedance that matches an output impedance of a transmitter
amplifier of the handheld device, the impedance determined by performing a finite element
analysis on a design of the antenna to determine an estimated output impedance, and
adjusting the antenna if the estimated output impedance does not approximately match the
10 transmitter amplifier output impedance.

27. (AMENDED) A method for wireless communications comprising:

determining the output impedance of a transmitter amplifier of a wireless device;

[adjusting the impedance of a patch antenna for the wireless device to match the
output impedance of the transmitter amplifier]

5 performing a finite element analysis on a design of a patch antenna to determine an
estimated output impedance;

adjusting the area of the patch antenna if the estimated output impedance does not
approximately match the transmitter amplifier output impedance; and

providing the patch antenna for use with the wireless device.